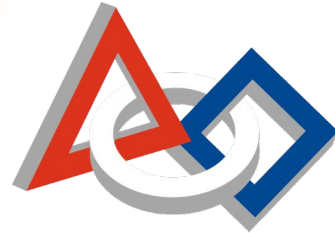


# SLUM VENTILATION

TECH TIGERS



**CITY  
SHAPER**



**FLL**  
FIRST LEGO® League

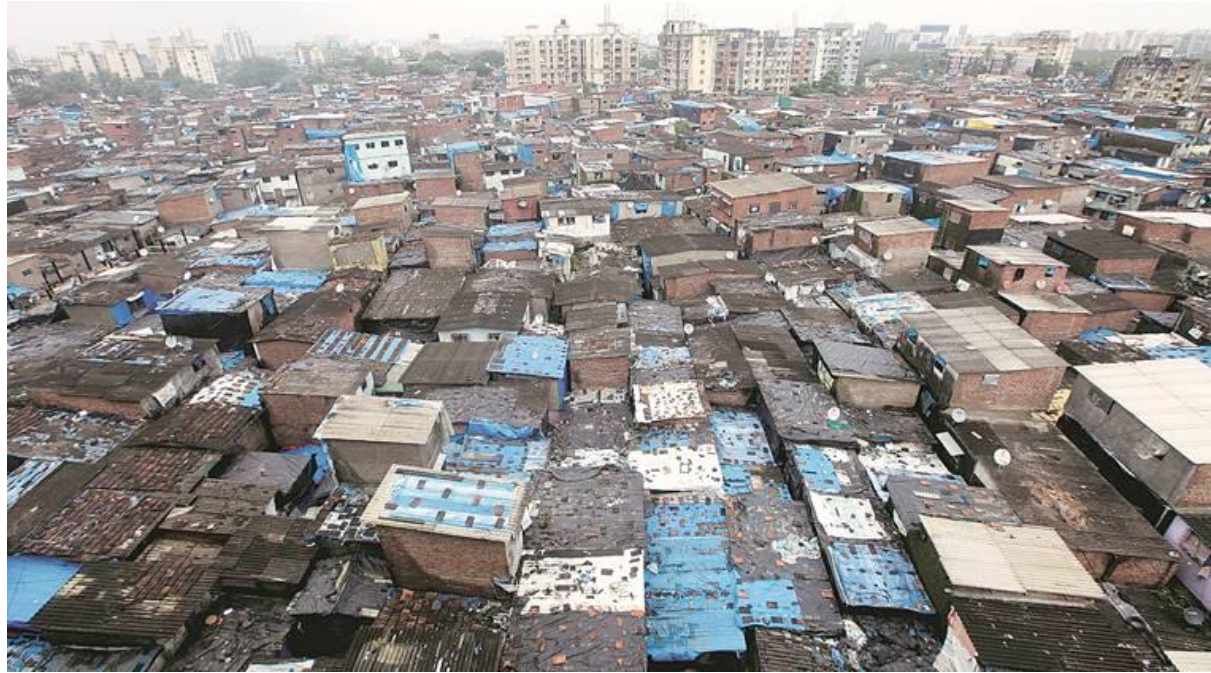
# Problem Statement

- VENTILATION in slum houses as a really big problem .
- Ventilation is a key to keeping our Mind Body and Surrounding fresh.
- Slums have a huge impact on the various diseases.
- The poor housing conditions with no ventilation and sunlight, makes it vulnerable to diseases and epidemic.



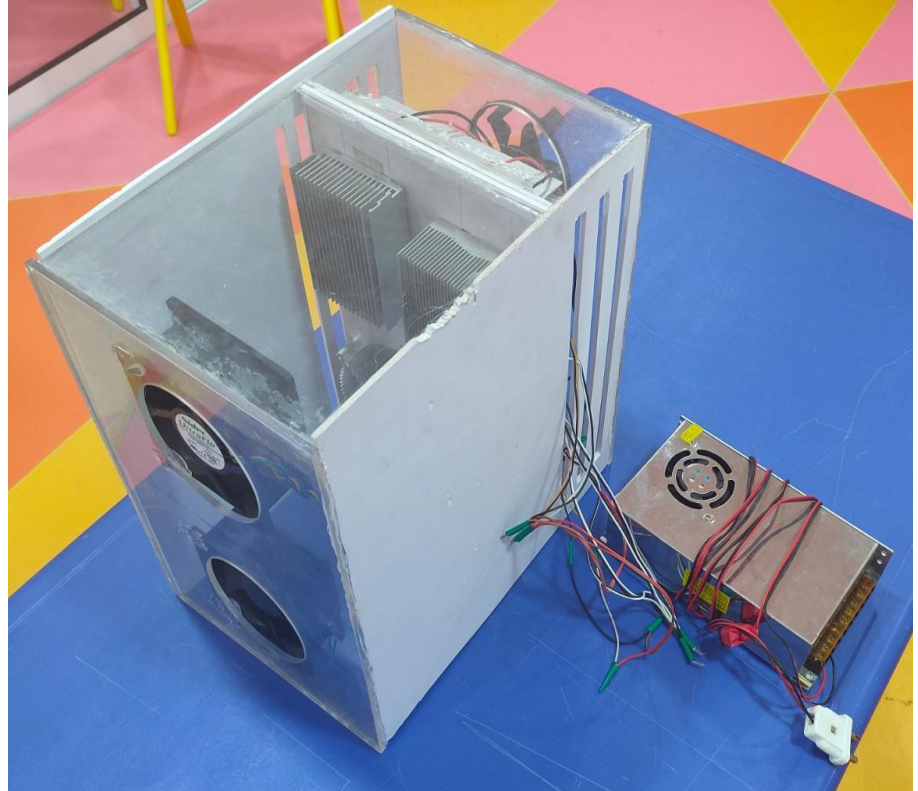
# Research

- Slums are an integral part of a city and Mumbai houses more than 42% of the population in slums.
- They grow in a very unorganised manner, are filthy and cramped.
- Over 54% of the world's population resides in slums.

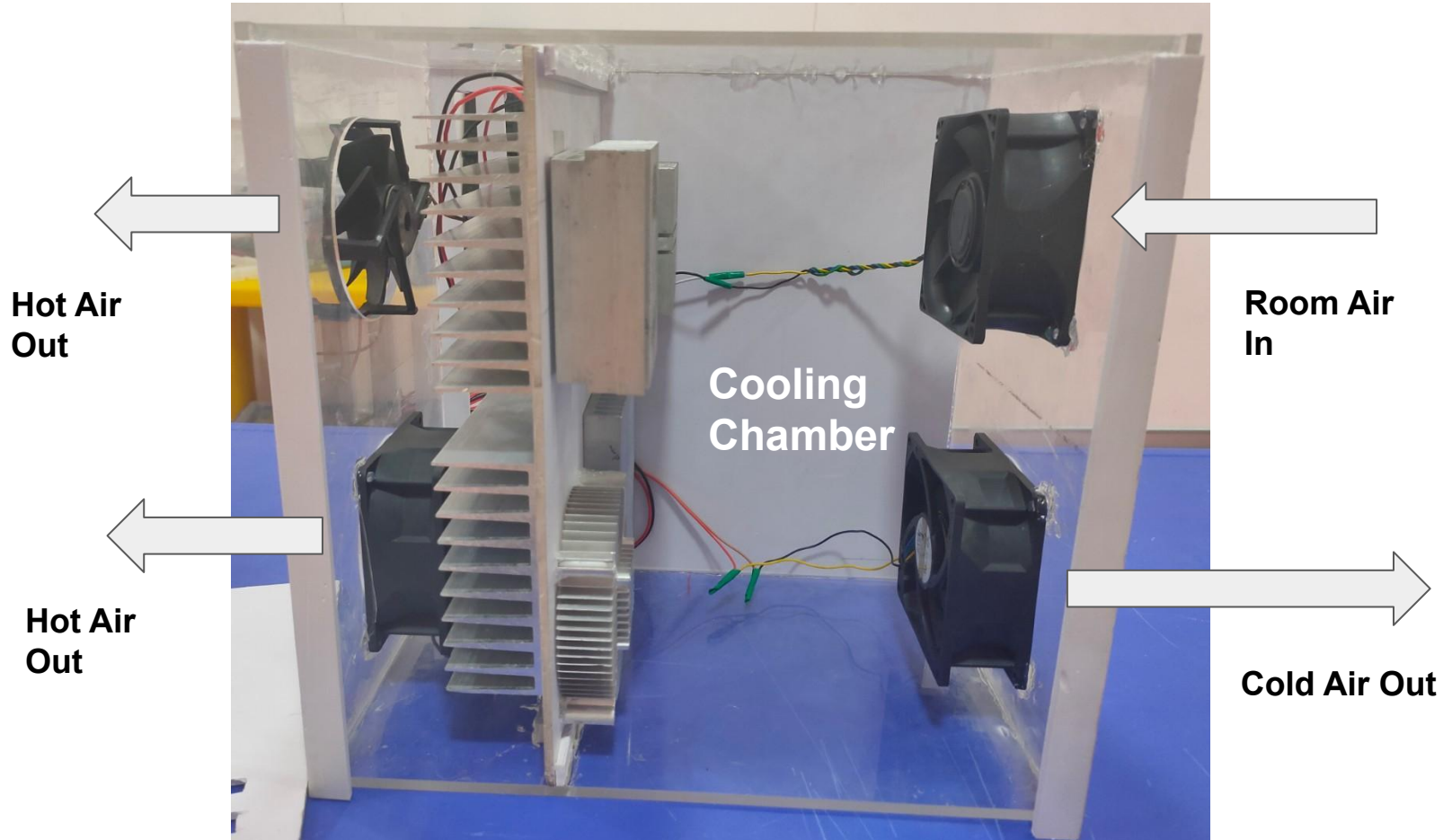


# Our Solution

- Peltier is a key component used to lower the temperature of the air.
- Heat sink are used to absorb the heat as well as cold from peltier.
- Structure is made up of Acrylic and sunboard sheets.
- Powered by 12v power SMPS.
- Fans for air circulation in and out.

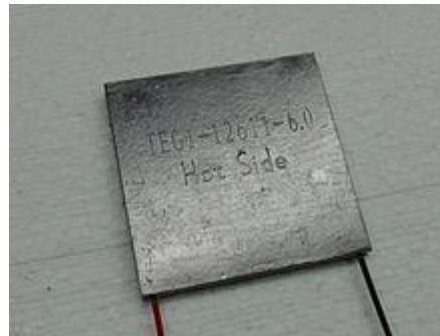


# Schematic Layout





**Heat Sinks**



**Peltier**



**Power  
Supply**

# Conclusion

- Improves Air Circulation
- Decreases Humidity
- There is temperature drop minimum off 3 degrees.
- Cost efficient.
- Small in size and suitable for slum houses.

